

Authority to use Automatic-Inflatable Personal Flotation Devices (PFDs)
Change #0010

Replace the following **2 SECTIONS** in EM 385-1-1, Nov 03

Replace Section 05.H in its entirety with the following:

05. H. PERSONAL FLOTATION DEVICES

05.H.01 Inherently buoyant Type III, Type V work vests, or better U.S. Coast Guard (USCG)-approved personal flotation devices (PFDs) shall be provided to and properly worn (zipped, tied, latched, etc., in closed fashion) by all persons in the following circumstances: **>See Types at Figure 5-1**

- a. On floating pipelines, pontoons, rafts, or stages;
- b. On structures or equipment (including heavy operating equipment that is not secured to the structure) extending over or next to water except where guardrails, personal fall protection system, or safety nets are provided for employees;
- c. Working alone at night where there are drowning hazards regardless of other safeguards provided;
- d. In skiffs, small boats, or launches, unless in an enclosed cabin or cockpit;
or
- e. Wherever there is a drowning hazard.

05. H.02. Automatic-Inflatable PFDs Type V or better, USCG-approved for Commercial Use, may be worn by workers on USACE sites in lieu of inherently buoyant PFDs (see conditions 05.H.01.a-e above), provided the following criteria are met:

- a. PFDs are worn only by workers over 16 years of age and those who weigh 90 lb or more,
- b. An AHA must be performed for this activity,
- c. PFDs must be inspected, maintained, stowed and used only in accordance with the manufacturer's instructions (currently not intended to be used in areas of heavy construction or maintenance or where hot work (welding, brazing, cutting, soldering, etc.) is to be performed),
- d. PFDs shall provide a 30-pound minimum buoyancy post-deployment,

e. USACE employees shall comply with USACE's Auto-Inflatable Personal Flotation Device, Standards of Use Procedures, dated 1 July 2007.

05. H.03 All wearable PFDs shall be of a highly visible orange/reddish color (46 CFR Part 160 and equipped with retroreflective material meeting USCG requirements (46 CFR Part 25.25-15). Each PFD shall be equipped with a USCG-approved automatically activated light (lights are not required for PFDs on projects performed exclusively during daylight hours). Before and after each use, the PFD shall be inspected for defects that would alter its strength or buoyancy.

05. H.04 Throwable devices (Type IV PFD).

- a. On USCG-inspected vessels, ring buoys are required to have automatic floating electric water lights as required by 46 CFR 160.
- b. On all other floating plant and shore installations, lights on life rings are required only in locations where adequate general lighting (e.g., floodlights, light stanchions) is not provided. For these plants and installations, at least one life ring, and every third one thereafter, shall have an automatic floating electric water light attached.
- c. All PFDs shall be equipped with retroreflective tape in accordance with USCG requirements.
- d. Life rings (rope attachment not required) and ring buoys (rope attachment required) shall conform to the requirements of 46 CFR 160 (USCG approved) and should have at least 70 ft (21.3 m) of 3/8-in (0.9-cm) solid braid polypropylene, or equivalent, attached. Throw bags may be used in addition to life rings or ring buoys. Life rings or ring buoys shall be readily available and shall be provided at the following places:
 - (1) At least one on each safety skiff;
 - (2) At least one on all motor boats up to 40 ft (12.1 m) in length and at least two for motor boats 40 ft (12.1 m) in length or longer;
 - (3) At least two on any other piece or group of floating plant up to 100 ft (30.4 m) in length and one additional for each increase in length of 100 ft (30.4 m) or fraction thereof; and
 - (4) At least one at intervals of not more than 200 ft (60.9 m) on pipelines, walkways, wharves, piers, bulkheads, lock walls, scaffolds, platforms, and similar structures extending over or immediately next to water, unless the fall distance to the water is more than 45 ft (13.7 m), in which case a life ring shall be used. (The length of line for life rings at these

locations shall be evaluated, but the length may not be less than 70 ft (21.3 m)).

05.H.05 At navigation locks, an analysis of the benefits versus the hazards of using floating safety blocks (blocks that may be quickly pushed into the water to protect individuals who have fallen in the water from being crushed by vessels) shall be made.

a. This analysis shall be documented as an AHA.

b. If the use of blocks is found acceptable, consideration shall be given to the size and placement of the blocks, the appropriate means of securing and signing the blocks, etc. When the use of blocks is found unacceptable, alternative safety measures shall be developed.

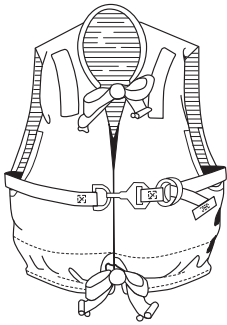
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FIGURE 5-1

PERSONAL FLOTATION DEVICES

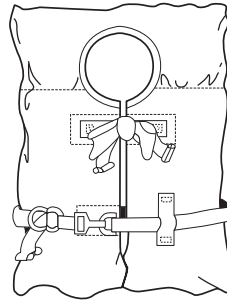
Off-Shore Life Jacket (Type I PFD)

Best for open, rough or remote water, where rescue may be slow coming.



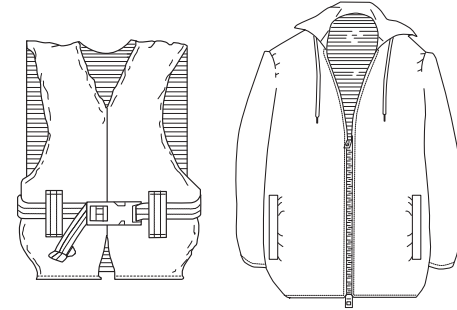
Near-Shore Buoyant Vest (Type II PFD)

Good for calm, inland water, or where there is a good chance of fast rescue



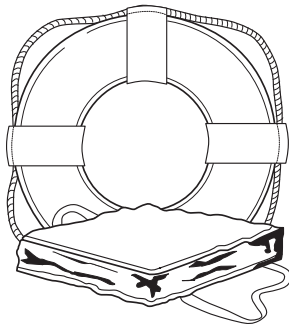
Flotation Aid (Type III PFD)

Good for calm, inland water, or where there is a good chance of fast rescue



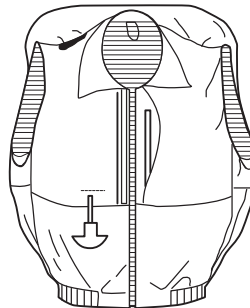
Throwable Device (Type IV PFD)

For calm, inland water with heavy boat traffic, where help is always nearby



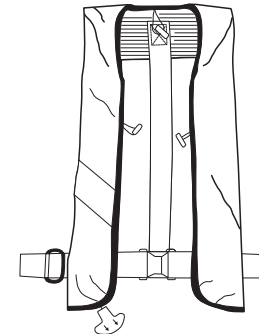
Special Use Devices (Type V PFD)

Only for special use or conditions



Inflatable Device (Type V Hybrid)

Only for special use or conditions



Replace 19.A.03.d with:

19.A.03.d USCG approved PFDs (Types I, II, III, or V) shall be worn by all personnel on decks exposed to severe weather, regardless of other safety devices used. USCG-approved, Type V automatic inflatable PFDs rated for commercial use may be worn by workers on USACE sites per 05.H.02.